

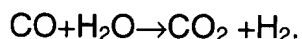
AMENDMENTS TO THE SPECIFICATION

Please replace Paragraph [0003] with the following paragraph rewritten in amendment format:

[0003] An exemplary steam reformer is described in U.S. Pat. No. 4,650,727 to Vanderborgh. For another example, in an autothermal reformation process, a hydrocarbon fuel (such as gasoline), air and steam are ideally reacted in a combined partial oxidation and steam reforming catalytic reactor (a.k.a. autothermal reformer) to generate a reformat gas containing hydrogen and carbon monoxide. An exemplary autothermal reformer is described in U.S. Application No. 09/626,553 filed July 27, 2000. The reformat exiting the reformer contains undesirably high concentrations of carbon monoxide most of which must be removed to prevent poisoning of the catalyst of the fuel cell's anode. In this regard, carbon monoxide (i.e., about 3-10 mole %) contained in the H₂-rich reformat/effluent exiting the reformer must be reduced to very low nontoxic concentrations (i.e., less than about 20 ppm) to avoid poisoning of the anode.

Please replace Paragraph [0004] with the following paragraph rewritten in amendment format:

[0004] It is known that the carbon monoxide, CO, level of the reformat/effluent exiting a reformer can be reduced by utilizing a so-called "shift" reaction wherein water (i.e. steam) is added to the reformat/effluent exiting the reformer, in the presence of a suitable catalyst. This lowers the carbon monoxide content of the reformat according to the following ideal shift reaction:



Please replace Paragraph [0008] with the following paragraph rewritten in amendment format:

[0008] PrOx reactors may be either (1) adiabatic (i.e. where the temperature of the reactor is allowed to rise during oxidation of the CO) or (2) isothermal (i.e. where the temperature of the reactor is maintained substantially constant during oxidation of the CO). The adiabatic PrOx process is sometimes effected via a number of sequential stages, which progressively reduce the CO content in stages, and requires careful temperature control, because if the temperature rises too much, the RWGS reaction can occur which counter productively produces more CO. The isothermal process can effect the same CO reduction as the adiabatic process, but in fewer stages and without concern for the RWGS reaction if (1) the reactor temperature can be kept low enough, and (2) O₂ depletion near the end of the reactor can be avoided.

Please replace Paragraph [0011] with the following paragraph rewritten in amendment format:

[0011] Accordingly, there exists a need in the relevant art to provide a fuel processor that is capable of heating the fuel processor components quickly to achieve these high operating temperatures for startup. Furthermore, there exists a need in the relevant art to provide a fuel processor that maximizes this heat input into the fuel processor while minimizing the tendency to form carbon monoxide. Still further, there exists a need in the relevant art to provide a fuel processor capable of heating the fuel processor while minimizing the use of electrical energy during startup and the reliance on catalytic reactions.